



**Testimony
Committee on Appropriations
Subcommittee on Labor, Health and Human
Services, Education, and Related Agencies and
Subcommittee on Financial Services and
General Government
United States Senate**

**Childhood Obesity and the Impact of
Food Marketing to Children**

Statement of

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Introduction

Distinguished Chairmen, Members of the Committees, thank you for the opportunity to provide this statement for the record for today's hearing on food marketing to youth. I am Dr. Julie Louise Gerberding, Director of the Centers for Disease Control and Prevention (CDC), and Administrator of the Agency for Toxic Substances and Disease Registry (ATSDR), within the U.S. Department of Health and Human Services. My statement provides you with an overview of the obesity epidemic including updated surveillance data on youth overweight and obesity; the role of a healthful diet in obtaining and maintaining healthy weight; the effects of food marketing on youth dietary habits; and a description of CDC's resources to combat the childhood obesity epidemic.

Youth Obesity Epidemic

To understand the extent of the youth obesity epidemic, we need to grasp the trend in youth weight gain over the past few decades. National Health and Nutrition Examination Survey (NHANES) data revealed that between 1976 and 1980 the prevalence of overweight among youth aged 2-5 years was 5 percent, for youth 6-11 years it was 6.5 percent, and for youth aged 12-19 year it was 5 percent. The most recent data available from NHANES (2003 – 2006) show the prevalence of overweight among America's youth to be 12.4 percent for 2-5 year olds, 17 percent for 6-11 year olds and 17.6 percent for 12-19 year olds. These data point to an alarming rate of obesity among youth in all age groups. To

determine whether a child was overweight CDC determined their body mass index (BMI), which is a number calculated from a child's weight and height.

BMI is an accepted screening tool for the initial assessment of body fatness for children, but it is not a diagnostic measure. It is also an acceptable tool to determine overweight status of children and youth at the population level. If a child's BMI was at or above the 95th percentile the child was classified as overweight or at risk for obesity. Recently, however, an expert Committee on Assessment, Prevention and Treatment, of Child and Adolescent overweight and Obesity¹ has recommended classifying children whose BMI is at or above the 95th percentile for age and gender on the CDC growth charts as obese. This is only a change in the terminology.

Obesity among youth has emotional, social and physical consequences and is associated with early onset of chronic diseases such as arthritis, asthma, type 2 diabetes, and heart disease. In fact, 61 percent of obese children aged 5-10 years old have one or more risk factors for heart disease and 27 percent have two or more risk factors for heart disease. (Freedman DS et al. Pediatrics 1999;103:1175-8.)

Further, high childhood BMI is associated with an increased likelihood of adult obesity. Adult overweight and obesity increases the risk of many diseases and

¹ The committee was supported by the American Medical Association, the Health Resources and Service Administration and the Centers for Disease Control and Prevention, to figure out solutions for the growing number of children who are severely overweight. It included representatives from 15 medical societies such as the American Academy of Pediatrics and the National Medical Association.

chronic health conditions, including coronary heart disease, stroke, type 2 diabetes, and some cancers. In 2001 dollars, obesity-associated annual hospital costs among youth were estimated to have more than tripled from \$35 million in 1979-1981 to \$127 million in 1997-1999. (Wang G and Dietz WH. Economic Burden of Obesity in Youths Aged 6 to 17 years: 1979-1999. *Pediatrics*. 2002;109:e81.) In 2000, the total direct and indirect healthcare costs (which include medical costs and days lost because of illness, disability, or premature death) from obesity for all ages was estimated to be \$117 billion. (Wolf, AM, Manson JE, Colditz GA. The Economic Impact of Overweight, Obesity and Weight Loss. In: Eckel R, ed. Obesity: Mechanisms and Clinical Management. Lippincott, Williams and Wilkins; 2002)

One of the national Healthy People 2010 objectives is to “reduce the proportion of children and adolescents who are overweight or obese” to the target of 5 percent. Not since 1980 has the prevalence of overweight and obesity among youth been at or near this target.

Obesity is often the result of an improper balance between energy/calories consumed (poor diet) and energy expended (physical inactivity). The increasing rate of obesity among the nation’s youth demonstrates the necessity of engaging in a comprehensive approach focused on policy and environmental changes that help make the healthy choice the easy choice when it comes to nutrition and physical activity. Appropriate policy and environmental changes can be effective in increasing the consumption of fruits and vegetables, increasing physical

activity, increasing the initiation and duration of breastfeeding, reducing television viewing, reducing the consumption of sugar sweetened beverages, and reducing calorie dense-nutrient poor food intake.

Role of Healthy Diet

Healthy eating in childhood and adolescence is important for overall healthy growth and development and can prevent health problems such as obesity, dental caries, and iron deficiency anemia as well as positively affect mental acuity and academic performance. The diets of most young people, however, do not meet the recommendations set forth in the Dietary Guidelines for Americans. Of U.S youth aged 12-18, only 39.1 percent meet the total grain recommendation and only 3.4 percent meet the recommendations for whole grain intake. (USDA, Grain Consumptions by Americans, Nutrition Insights 32, August 2005.)

According to CDC's National Youth Risk Behavior Survey, in 2007, only 21.4 percent of high school students reported eating five or more servings of fruits and vegetables (when fried potatoes and potato chips are excluded) per day during the past seven days. Only 14.1 percent drank three or more glasses per day of milk (Morbidity and Mortality Weekly Report 2006; 57 SS04; 1-131.)

CDC Efforts to Address Food Marketing to Youth and Childhood Obesity

In 2004, CDC commissioned IOM to conduct a study on food marketing to children. One of the conclusions of the study was that, "public policy programs and incentives do not currently have the support or authority to address many of the current and emerging marketing practices that influence the diets of children

and youth.” CDC is exploring options to identify and assess the feasibility of implementing policy and environmental change strategies aimed at both reducing television viewing as well as positively influencing those products that are marketed to youth. CDC is working closely with the Academy for Educational Development (AED) to develop a research plan around marketing to children. Based on recommendations from the IOM committee members, the plan will focus on 8-12 year olds and on vegetables, in particular, because consumption of vegetables is lower than consumption of fruits.

In 2005, CDC created the National Center for Health Marketing in response to communication innovations to revolutionize the way people receive and use health information and interventions to make healthy decisions. To increase the reach and impact of health information by understanding when, where, and how people need it, CDC is exploring the potential for conducting health literacy and content analysis research on food marketing to youth on television and through other communication channels including the Web, social networks, and new media.

In 2007, CDC and partners launched Fruits & Veggies — More Matters™, a marketing and communication strategy designed to influence healthy dietary choices to replace high calorie dense foods. The National Fruit and Vegetable Alliance, CDC and Produce for Better Health Foundation (PBH) are leading Fruits & Veggies — More Matters™, which is a health initiative that consumers will see in stores, online, at home, and on packaging. It replaces the existing 5 A

Day awareness program and will leverage the 5 A Day heritage and success to further inspire and support consumers to eat more fruits and vegetables, showcasing the unrivaled combination of great taste, nutrition, abundant variety, and various product forms (fresh, frozen, canned, dried, and 100 percent juice). It also will build upon the body of science that indicates increased daily consumption of fruits and vegetables may help prevent many chronic diseases.

CDC's School Health Policies and Program Study is a national survey conducted to assess school health policies and practices at the state, district, school, and classroom levels. The 2006 study showed that many schools are taking a leadership role in marketing healthy food options to their students. A majority of the schools in the study gave menus to their students to promote the school nutrition services program (95.6 percent), placed posters or other materials promoting healthy eating practices in the cafeteria area (82.7 percent), included articles about the school nutrition services program in their school publications (68.0 percent), and included nutrition services topics during school-wide announcements (53.3 percent). However, one third of all school districts allowed soft drink companies to advertise soft drinks in school buildings (35.8 percent) and almost half of all school districts allowed soft drink companies to advertise on school grounds, including on the outside of school buildings and on playing fields (46.6 percent). Additionally, less than 25 percent of school districts prohibit schools from advertising for candy, fast food restaurants, or soft drinks on school property.

In addition to these efforts, CDC has a number of initiatives and programs under way to address childhood obesity. They include programs in education, surveillance of youth nutrition behaviors and obesity rates, surveillance of school policies and programs, translation and promotion of effective intervention strategies, and policy and Web-based tools for healthy eating, physical activity, and obesity.

CDC's National Coordinated School Health Program to Improve Physical Activity, Nutrition, and Prevent Tobacco Use Among Youth

CDC provides funding for 22 state education agencies (average award: \$411,000) and 1 tribal government (\$275,000) to help school districts and schools implement a Coordinated School Health Program (CSHP), and, through this approach, increase effectiveness of policies, programs, and practices to promote physical activity, nutrition, and tobacco-use prevention among students.

A CSHP is a planned, organized set of health-related programs, policies, and services coordinated to meet the health and safety needs of K-12 students at both the school district and individual school building levels. CSHP is comprised of multiple components that can influence health and learning. These include physical education; health education; health services; nutrition services; counseling and psychological services; a healthy school environment; family/community involvement; and health promotion for staff. Active coordination is needed to engage school staff, implement district/school priority

actions; assess programs and policies; create a plan based on data and sound science; establish goals; and evaluate efforts.

CDC's National Nutrition and Physical Activity Program to Prevent Obesity

CDC is funding 23 states (average award \$750,000) to improve healthful eating and physical activity to prevent and control obesity and other chronic diseases by building and sustaining statewide capacity and implementing population-based strategies and interventions. Funded state programs develop strategies to leverage resources and coordinate statewide efforts with multiple partners to address all of the following principal target areas: increase physical activity; increase the consumption of fruits and vegetables; increase breastfeeding initiation, duration and exclusivity; reduce the consumption of high energy dense foods; decrease the consumption of sugar sweetened beverages; and decrease television viewing.

From individual behavior change to changes in public policy, state efforts aim to engage multiple levels of society including individual, family and community settings. Each state funded by the Nutrition and Physical Activity Program to Prevent Obesity and Other Chronic Diseases uses the Social-Ecological Model to more fully understand the obesity problem in that state. This model serves as a reminder to look at all levels of influence that can be addressed to support long-term, healthful lifestyle choices. State efforts include making policy and environmental changes to encourage access to healthy foods and places to be active, and strengthening obesity prevention and control programs in preschools,

child care centers, work sites, and other community settings. All funded states will continue to evaluate their interventions to determine their effectiveness and to guide future efforts.

Supporting Communities through the Steps Program

The Steps Program is a critical part of CDC's national efforts to address the urgent realities of chronic disease and obesity. Since 2003, Steps has supported local communities to implement evidence-based interventions in community-based settings including schools, workplaces, community organizations, health care settings, and municipal [city/county] planning, to achieve local changes necessary to prevent chronic diseases and their risk factors. Special focus has been directed toward populations with disproportionate burden of disease and lack of preventive services. In FY 2008, CDC is supporting 21 communities through cooperative agreements with three states (average award \$1.580 million), five local urban health departments (average award \$1.256 million), and two tribal organizations (average award \$747,000). In addition, CDC is supporting 14 communities through new cooperative agreements with two states, two local urban health departments, and two tribal organizations and 40 additional communities through new cooperative agreements with national organizations.

As part of the new grant strategy, CDC will support 50 Steps Community Grants in FY 2009. Communities will receive funds to spark local-level action, change community conditions to reduce risk factors, establish and sustain state-of-the-art

programs, test new models of intervention, create models for replication, and help train and mentor additional communities. Tools, resources, and training will be provided to community leaders and public health professionals to equip these entities to effectively confront the urgent realities of the growing national crisis in obesity and other chronic diseases in their communities.

CDC Surveillance Programs

CDC monitors the nation's health through surveillance programs in order to accomplish its mission to promote health and quality of life by preventing and controlling disease, injury, and disability.

Through its ongoing National Health and Nutrition Examination Survey, CDC produces nationally representative surveillance data on the prevalence of overweight and obesity among children and adolescents based on measured height and weight, as well as on their physical activity and dietary behaviors.

(Additional information available at www.cdc.gov/nchs/nhanes.htm.)

In addition, CDC's biennial Youth Risk Behavior Survey provides national, state, and city data on self-reported height and weight, physical activity, physical education, and dietary behaviors among high school students. (Additional information available at <http://www.cdc.gov/HealthyYouth/yrbs/>.)

CDC's School Health Policies and Program Study (SHPPS) is a national survey periodically conducted to assess school health policies and programs of state

education agencies and of nationally representative samples of school districts, schools, and physical education and health education classrooms. SHPPS provides national data on what schools are doing in relation to physical education, after school physical activity programs, recess, nutrition education, school food service, and vending machine policies and practices.

(Additional information available at <http://www.cdc.gov/HealthyYouth/shpps/>)

CDC's School Health Profiles survey, conducted every other year, tells us about the extent to which schools are implementing physical education, physical activity, and nutrition-related policies and practices in different states and cities.

(Additional information available at <http://www.cdc.gov/HealthyYouth/profiles/>)

CDC's Pediatric Nutrition Surveillance System (PedNSS) is a child-based public health surveillance system that describes the nutritional status of low-income U.S. children who attend federally-funded maternal and child health and nutrition programs. PedNSS provides data on the prevalence and trends of nutrition-related indicators. (<http://www.cdc.gov/pednss/index.htm>)

Tools to help schools and community-based organizations promote healthy eating

CDC has developed, and is continuing to develop, a variety of tools that schools and community based organizations can use to implement policies and practices.

Examples include:

- *The Guide to Community Preventative Services: Review of Interventions that Support Healthy Weight*, which is a systematic review of the effectiveness of selected population-based interventions aimed at supporting healthful weight among children, adolescents, and adults; <http://www.thecommunityguide.org/obese/>
- *Guidelines for School and Community Programs to Promote Lifelong Healthy Eating Among Young People* that identify the most effective policies and practices schools can implement to help young people adopt and maintain healthy eating habits;
<http://www.cdc.gov/mmwr/preview/mmwrhtml/00042446.htm>
- *CDC's School Health Index for Physical Activity and Healthy Eating*, a widely used self-assessment and planning tool, enables schools to identify the strengths and weaknesses of their health promotion policies and programs, develop an action plan for improving student health, and involve teachers, parents, students, and the community in improving school policies and programs;
<http://apps.nccd.cdc.gov/shi/default.aspx>
- *Fit Healthy and Ready to Learn*, a school health policy guide, developed by the National Association of State Boards of Education with CDC support, that provides education policymakers and administrators with sample physical activity and nutrition policies and information to support the policies;

- *Making It Happen – School Nutrition Success Stories (MIH)*, a joint product of CDC and USDA, tells the stories of 32 schools and school districts that have implemented innovative strategies to improve the nutritional quality of foods and beverages offered and sold on school campuses. The most consistent theme emerging from these case studies is that students will buy and consume healthful foods and beverages—and schools can make money from healthful options;
<http://www.cdc.gov/healthyyouth/nutrition/Making-It-Happen/about.htm>
- *The Health Education Curriculum Analysis Tool* which is a user-friendly checklist designed by CDC to help schools select or develop curricula based on the extent to which they have characteristics that research has identified as being critical for leading to positive effects on youth health behaviors. The companion Healthy Eating Curriculum Analysis Tool will help school districts promote healthy eating, sound nutrition, and healthy dietary practices based on insights gained from research and best practice, and;
<http://www.cdc.gov/HealthyYouth/HECAT/index.htm>
- *The CDC Program Technical Assistance Manual*, was created to serve CDC’s state and community partners as they develop, implement, and evaluate an array of nutrition and physical activity initiatives that aim to prevent and control obesity and other chronic diseases.
- *We Can! (Ways to Enhance Children’s Activity & Nutrition)*, a national NIH-supported public education program for reaching parents and

caregivers of children ages 8-13 in home and community settings -- provides educational materials and activities to encourage healthy eating, increase physical activity, and reduce "screen-time" among youth. NIH and CDC are working together to promote We Can! and CDC's school health tools (e.g., the School Health Index) and resources to partners; nongovernmental organizations; state departments of education and departments of health; schools; and community sites.

I have briefly described the efforts of CDC in this area; we are but one of many programs within the Department of Health and Human Services focusing on this epidemic. For example, CDC is an active member in "Healthy Youth for a Healthy Future," the Secretary's Childhood Overweight and Obesity Prevention Initiative that is spearheaded by the Acting Surgeon General, Rear Admiral Steven Galson. Uniting programs from across the Department, the Childhood Overweight and Obesity Prevention Council has implemented an action plan that leverages and enhances programs that prevent childhood overweight and obesity. The Council synergizes Department-wide prevention efforts, including community interventions and evaluation, outreach and services, and education and research. The Council's efforts have broadened the reach of individual agency campaigns.

CDC also supports the Surgeon General's Outreach Tour under the "Healthy Youth for a Healthy Future" campaign which is traveling from state to state,

meeting with communities to recognize and bring attention to effective prevention programs that motivate organizations and families to work together on this issue. The tour focuses on three themes: Help Children Stay Active, Encourage Health Eating Habits, and Promote Healthy Choices. During the visits, the focus is not only about the importance of childhood overweight and obesity prevention, but also on model healthy behaviors for children of all ages realizing these are significant teaching moments that will help them develop healthy habits to last a lifetime.

Conclusion

No single cause or factor is to blame for the epidemic of obesity among children and adolescents. Indeed, many factors have contributed to the unfavorable trends in physical activity and nutrition that have fueled the obesity epidemic.

We have learned a great deal about effective strategies for promoting physical activity and healthy eating among young people. We know that no one strategy alone will be sufficient to slow or reduce the obesity epidemic. Our chances for success will be greater if we use multiple strategies to address multiple factors that contribute to the imbalance between calorie consumption and physical activity and if we involve multiple sectors of society at the community, state, and national levels.

CDC is committed to doing all that we can to help our young people enjoy good health now and for a lifetime. I thank you for your interest and the opportunity to

share information about the childhood obesity epidemic, the importance of good nutrition in combating the epidemic and an overview of CDC's activities. I would be happy to answer your questions.